Attorney Docket No.: 02481.1337-04

divisional of U.S. application Ser. No. 08/404,949, filed March 15, 1995, which is a continuation of U.S. application Ser. No. 08/129,379, filed September 30, 1993.

BACKGROUND OF THE INVENTION--;

Page 2, after line 20, please insert:

--BRIEF DESCRIPTION OF THE DRAWINGS

- FIG. ${\bf 1}$ demonstrates the purification of the sFv-hu β -Gluc fusion protein by TSK 3000 gel chromotography.
- FIG. 2 shows the nucleotide sequences of oligonucleotides pAB-Back, linker-anti, linker-sense, and $V_{\text{L(Mut)}}\text{-For.}$
- FIG. **3** is a schematic representation of the amplification of the $V_{\rm H}$ gene, including the signal sequence intrinsic to the $V_{\rm H}$ gene, from the plasmid pABstop 431V_Hhum ($V_{\rm H}431/26$) by PCR using oligonucleotides pAB-Back and linker-anti, and the amplification of the $V_{\rm L}$ gene from pABstop 431V_Lhum ($V_{\rm L}431/26$) by PCR using oligonucleotides linker-sense and $V_{\rm L(Mut)}$ -For.
- FIG. $\bf 4$ is a schematic representation of the amplification and fusion of the $V_H431/26$ and the $V_L431/26$ gene fragments by PCR.
- FIG. **5** is a schematic representation of the cloning of the sFv 431/26 fragment into the expression vector pAB 431V_Hhum/C_H1 + $1H/\beta$ -Glc, which contains the hu β -glucuronidase gene.

EINNEGAN, HENDLESON, FARABOW, GARRETI, & DUNNER, L. L. P. 1300 I STREET, N. W. WASHINGTON, DC 20005 202 408 4000

Attorney Docket No.: 02481.1337-04

FIG. **6** is a schematic representation of the plasmid pRMH 140, which harbors a neomycin-resistance gene.

FIG. **7** is a schematic representation of the plasmid pSV2, which harbors a methotrexate-resistance gene.

FIG. **8** shows the nucleotide sequences of oligonucleotides sFv for (2561), sFv back (2577), Hum. β -Gluc. back oligo (2562), Hum. β -Gluc. for oligo (2540), PCR oligo VHpIXY back (2587), and PCR oligo VKpIXY for (2627).

FIG. **9** is a schematic representation of the amplification of the single-chain Fv, sFv 431/26, by PCR using oligonucleotides 2561 and 2577, and the cloning of that single-chain Fv into the vector pUC19.

FIG. **10** is a schematic representation of the amplification of the human β -glucuronidase gene from the plasmid pAB 431V_Hhum/CH1 + 1H/hu β -Gluc by PCR using oligonucleotides 2562 and 2540, and the ligation of that gene into the plasmid sFv 431/26 in pUC19.

FIG. 11 is a schematic representation of the amplification of a KpnI/NcoI fragment from the sFv 431/26 by PCR using oligonucleotides 2587 and 2627, and the cloning of that fragment into the yeast expression vector pIXY.

ENNEGAN, HENDERSON, FARABOW, GARRITI, & DUNNER, L.L.P. isoo i street, N. w. washington, do 20005 202 408 4000

Attorney Docket No.: 02481.1337-04

FIG. 12 is a schematic representation of the ligation the BstEII/HindIII fragment from the plasmid sFv 431/26 hu β -Gluc in pUC19 into the vector pIXY 120 containing a V_H gene, a linker, and a part of a V_T gene.

FIG. 13 shows the nucleotide sequences of oligonucleotides E. coli β -Gluc. for (2639) and E. coli β -Gluc. back (2638).

FIG. **14** is a schematic representation of the amplification of the *E. coli* glucuronidase gene from the plasmid pRAJ275 by PCR using oligonucleotides 2638 and 2639, and the ligation of that gene into sFv 431/26 in pUC19.

FIG. 15 is a schematic representation of the cloning of the BstEII/HindIII fragment from the plasmid sFv 431/26 $E.\ coli\ \beta-$ Gluc in pUC19 into the vector pIXY 120.

FIG. **16** shows the nucleotide sequences of oligonucleotides PCR oligo VHpIXY back (2587), PCR oligo VKpIXY/ β -lactamase for (2669), PCR oligo link/ β -lactamase back (2673), and PCR oligo β -lactamase for (2674).

FIG. 17 is a schematic representation of the amplification of sFv 431/26 by PCR using oligonucleotides 2587 and 2669, and the cloning of sFv 431/26 into the vector pUC19.

FIG. 18 is a schematic representation of the amplification of the β -lactamase II gene from the complete DNA of Bacillus

FINNEGAN, HENDERSON, FARABOW, GARRETI, & DUNNER, L. L. P. 1300 I STREET, N. W. WASHINGTON, DC 20005 202 408 4000

Attorney Docket No.: 02481.1337-04

cereus by PCR using oligonucleotides 2673 and 2674, and the cloning of that gene into the vector pUC19.

FIG. ${\bf 19}$ is a schematic representation of the ligation of a BclI/HindIII fragment of the β -lactamase gene into sFv 431/26 in pUC19.

FIG. 20 is a schematic representation of the ligation of the KpnI/HindIII sFv β -lactamase fragment into the vector pIXY 120.--;

Page 4, line 19, please delete "sequence" and substitute therefor the nucleotide sequence of SEQ ID NO:1, which codes for the amino acid sequence of SEQ ID NO:2-to

Page 4, line 20, delete "indicated in Table 1";

Page 6, line 15, delete "Table 4" and substitute therefor -- Table 1--;

Page 6, line 27, delete "Table 5" and substitute therefor -- Table 2--;

Page 7, Iine 12, delete "Table 4" and substitute therefor -- Table 1--;

Page 7, line 32, delete "Table 6" and substitute therefor --Table 3--;

Page 8, \(\) ine 12, delete "Table 4" and substitute therefor -- Table 1--;

EINNEGAM, HENDERSON, FARABOW, GARRETT, & DUNNER, L.L.P. 1300 I STREET, N. W. WASHINGTON, DC 20005 202 408 4000

Attorney Docket No.: 02481.1337-04

Page 8 1ine 24, delete "Table 4" and substitute therefor -- Table 1--;

Page 10, line 3, after "pAB-Back", insert --(SEQ ID NO:3)--, and after "linker-anti", insert --(SEQ ID NO:4) (FIG. 2)--, and delete "(Tab. 2)";

Page 10, line 6, after "(V_H431/26)", insert --(FIG. 3)--;
Page 10, line 7, after "linker-sense", insert --(SEQ ID

NO:5)--;

Page 10, line 8, after " $V_{L(Mut)}$ -For", insert -- (SEQ ID NO:6) (FIG. 2)--, and delete "(Tab. 3);

Page 10, line 9, after " $(V_1431/26)$ ", insert --(FIG. 3)--;

Page 10, after line 9, delete the figure;

Page 11, line 27, after "linker", insert -- (FIG. 4)--;

Page 12, after line 4, delete the figure;

Page 13/4 line 14, after "(pMCG-E1)", insert -- (FIG. 5)--;

Page 18, after line 14, delete the figure;

Page 14, line 5, after "gene", insert -- (FIG. 6)--;

Page 14, line 7, after "gene", insert -- (FIG. 7)--;

Page 14, after line 10, delete the figure;

Page 15, delete the figure;

Attorney Docket No.: 02481.1337-04

Page 22, line 4, after "2577", insert --(SEQ ID NO:8)--, after "2561", insert --(SEQ ID NO:7) (FIG. 8)--, and delete "(Table 7)";

Page 22, line 6, delete "(Fig. 2)" and substitute therefor
--(FIG. 9)--;

Page 22, line 8, after "2562", insert --(SEQ ID NO:9)--, after "2540", insert --(SEQ ID NO:10) (FIG. 8)--, and delete "(Table 8)";

Page .2.; line 10, delete "(Fig. 2)" and substitute therefor --(FIG. 9)--;

Page 22, line 11, delete "(Fig. 3)" and substitute therefor -- (FIG. 10)--;

Page 22, line 12, after "2587", insert --(SEQ ID NO:11)--;
Page 22, line 13, after "2627", insert --(SEQ ID NO:12)

(FIG. 8)--, and delete "(Table 9)";

Page 22, line 15, delete "(Fig. 4)" and substitute therefor
--(FIG. 11)--;

Page 22, line 17, delete "(Fig. 3)" and substitute therefor --(FIG. 10)--;

Page 22, line 21, delete "(Fig. 5)" and substitute therefor -- (FIG. 12)--;

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L. L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005

202 408 4000

Attorney Docket No.: 02481.1337-04

Page 23, line 6, after "2638", insert --(SEQ ID NO:14)--, and after "2639", insert --(SEQ ID NO:13)--;

Page 23, line 7, delete "(Table 10)" and substitute therefor
--(FIG. 13)--;

Page 23, line 8, delete "Fig. 2" and substitute therefor --FIG. 9--, and delete "Fig. 6" and substitute therefor

--FIG. 14--;
Page 23, line 11, delete "Fig. 4" and substitute therefor
--FIG. 11--;

Page 23, line 12, delete "(Fig. 7)" and substitute therefor -- (FIG. 15)--;

Page 24, line 5, after "2587", insert --(SEQ ID NO:15)--, after "2669", insert --(SEQ ID NO:16) (FIG. 16)--, and delete "(Table 11)";

Page 24, line 7, delete "(Fig. 8)" and substitute therefor -- (FIG. 17) $-\dot{r}$;

Page 24, line 9, after "2673", insert --(SEQ ID NO:17)--;

Page 24, line 10, after "2674", insert -- (SEQ ID NO:18) (FIG. 16) --, and delete "(Table 11)";

Page 24, line 12, delete "(Fig. 9)" and substitute therefor -- (FIG. 18)--;

Attorney Docket No.: 02481.1337-04

Page 24, line 14, delete "(Fig. 10)" and substitute therefor $--(FIG. 19)_{r-}$;

Page 24, line 17, delete "(Fig. 11)" and substitute therefor -- (FIG. 20)--;

Pages 25, 29, please delete Tables 1-3;

Page 30, line 1, delete "Table 4", and substitute therefor -- Table 1--;

Page 31, line 1, delete "Table 5", and substitute therefor -- Table 2--;

Page 32, line 1, delete "Table 6", and substitute therefor --Table 3--; and

Pages 33-36, please delete Tables 7-11.

IN THE DRAWINGS:

Please renumber Figures 2-11 to correspond to new Figures 9-12, 14, 15, and 17-20, respectively, and add new Figures 2-8, 13, and 16, as indicated in the attached Request for Approval of Drawing Changes submitted concurrently herewith. New figures 2-8, 13, and 16 correspond to deleted Tables 2, 3, and 7-11 on pages 29 and 33-36 of the specification, and deleted drawings on pages 10 and 12-15 of the specification. No new matter has been added.

FINNEGAN, HANDERSON, FARABOW, GAERFTI, & DUNNER, L.I. P. 1300 I STREET, N. W. WASHINGTON, DC 20005 202 408 4000